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1 aacaagatgctattatggca.....gtttccatcacaagaggtag 474
                                                                                                                                                                                                                                            2944280
GenCore version 4.5
Copyright (c) 1993 - 2000 Compugen Ltd.
                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                   1472140 seqs, 8248589755 residues
                                                                                                                                                                                                                                                                                                                     Maximum Match 100%
Listing first 45 summaries
                                                 OM nucleic - nucleic search, using sw model
                                                                                                                                                                                IDENTITY_NUC Gapox 1.0
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em_htgo_inv:*
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Maximum DB seq length: 2000000000
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gb_pl: *
gb_pr: *
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                                                                                                                                             Perfect score:
                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                         Sequence:
                                                                                                                                                                                                                       Searched:
                                                                               Run on:
                                                                                                                               Title:
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Pred. No. is the number of results predicted by score greater than or equal to the score of the and is derived by analysis of the total score di

SUMMARIES

| Description | AJ222589 Zea mays AF093627 Zea mays | 1705 Arak | 65497 R.norveg | 67 | 340 | Z12139 X.laevis PA | Z48243 A.thaliana | Chicken | BC012041 Mus muscu | AJZZZSB8 Zea mays | e Mouse | ine | AFIZ6/I/ Mus muscu | AFIGS/BI Cricetulu | MI7081 Human place | | A52134 Sequence 1 | Human p | Ğ | 0 | | M32721 Human poly(| I14359 Sequence 5 | AF051548 Drosopnil | S54638 (pseudogene | | | 0 | ACUI4613 Drosophii | AECUZOSZ DIOSOPIILI | | 114357 Cecuence 3 | 2 Segment | AX058380 Sequence | | 17 | A.T236876 HOMO | 7 Secure | | 374 | 362 | 734 | 338 Secure | |
|----------------|--|-----------|----------------|-----------|----------|--------------------|-------------------|----------|--------------------|-------------------|---------|--------|--------------------|--------------------|--------------------|---------|-------------------|-----------|----------|----------|----------|--------------------|-------------------|--------------------|--------------------|-----------|--------|------------|--------------------|---------------------|----------|-------------------|-----------|-------------------|----------|----------|----------------|-----------|----------|----------|------|-------|------------|-------|
| QI | ZMP | AE 033027 | RNPARP2 | XELPADPRP | RNU94340 | XLPARPG | ATPARP | GGPADPRP | BC012041 | ZMPARP1 | MMADPRP | BOVPAS | AF126717 | AF168781 | HUMADPPO | HUMPOLP | A52134 | HUMRISDAD | GORADPRB | AX058340 | AX062277 | HUMPPOL | 114359 | DMPARP5 | S54638 | DROADPRPA | 114360 | HUMPADPRPZ | AC014613 | AE002892 | AL442128 | SPEPADPRP | 11435/ | AA030302 | AAUSOSOU | AAU30330 | 21606266 | HSA2306/0 | AXU3831/ | AA000032 | 200 | 200 | n ı | |
| DB | | 0 0 | | 'n | | | | | | 8 | | | | | | | | | | | | | | | | | | | 7 | | | | | | | | | | | | | | י ע | 9 |
| th | 3211 | 2200 | 1939 | 3718 | 3128 | 3617 | 2147 | 3036 | 3845 | 2295 | 3172 | 3589 | 1732 | 3047 | 1771 | 3640 | 3792 | 3795 | 5787 | 3045 | 3045 | 3660 | 3747 | 1822 | 2682 | 3080 | 5345 | | 7 | ٦, | 2 | | | | | | | | | | | | 1910 | 170 |
| Query Match | 0.0 | 9 6 | 33.1 | ٠ | : _: | _: | : | | | _: | | _: | · | _ | | \circ | 0 | 0 | | 29.4 | | 29.4 | 29.4 | 29.1 | | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.1 | 29.0 | 28.7 | 25.9 | 25.9 | 2.5 | 20.0 | 25.9 | 25.9 | 25.9 | 25.9 | 25. 4 | 25.5 | 25.4 |
| ore | 74 | 4/4 | א מ | 157.6 | ` - | 15 | 54 | | 152.2 | 5 | 2 | 50. | 14 | 147.4 | 42. | 142.6 | | 142.6 | 142.6 | 139.4 | | | 6 | 37. | 37. | 37. | 37. | 37. | 137.8 | 37. | 37. | 37. | 36. | 77 | 22 | 7 7 | 77 | 22 | 22 | 77 | | 22. | - | 120.2 |
| Result No. | 1 1 | 71 | m < | r u | n ve | ۰, | · 00 | े ज | 10 | 1: | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 61 | 20 | 22 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | c 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |

ALIGNMENTS

RESULT 1

ZMPARP2

LOCUS

LOCUS

LOCUS

LOCUS

Zea mays mRNA for poly(ADP-ribose) polymerase (3211bp).

AGCESSION

AJ222589.

AJ2226

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DKRTMLDLVKKDVGNNEQNKGSKRKKSENDIDSYKSARLDESTSEGTVRNKGOLVDPR
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                                                                                                                                                                                                                                                                                                                                                                                                                     GFMPMMNHASVDDVEGIDALRWDDQEKIRNYVGSASAGTSSTAAPPEKCTIEIAPSAR
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Submitted (14-NOV-1997) Kushnir S., VIB, Dep.Genetics,
Ledeganckstraat 35, Gent, B9000, Belgium
                                                                                                                                                                                                                                                 /function="secondary protein modification"
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                                                                                                                                                                                                                                                                                          /product="poly(ADP-ribose) polymerase"
/protein_id="CAA10889.1"
/db_xref="GI:2632129"
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                                                                                                                      /db_xref="taxon:4577"
                                                                                                    mays"
                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      813 g
                                                                                                 /organism="Zea
                                                                                                                                                                                                                                                                     /codon_start=]
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                                                                                                                                                                                                113. .3022
/qene="PARP"
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SØPERHLLDRCADGNLFGALGPCPVCANGMYYNGOYOCSGNYSEWSKCTYSATEPVR
YKKKWOIPHGTKNDYLMKWFKSQKVKKPERVLPPMSPEKSGSKATQRTSLLSSKGLDK
ÅRFSVVGQSKEAANEWIEKLKLAGANFYARVVKDIDCLIACGELDNENAEVRKARRLK
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YMFGKGLYFADLVSKSAQYCYVDRNNPVGLMLLSEVALGDMYELKKATSMDKPPRGKH
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VRÅKGQLVDPRGSNTSSADIQLKLKEQSDTLWKLKDGLKTHVSAAELRDMLEANGODT
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                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 3285)
Mahajan, P.B. and Zuo, Z.
Direct Submission
Submitted (22-SEP-1998) Crop Protection, Pioneer HiBred
International, Inc., 7300 NW $2nd Avenue, Johnston, IA 50131-1004,
                                                                                                                                                                                            ophyta; Tracheophyta;
                                                                                                                                                                                                                                                                                                       Poly(ADP)-ribose polymerase
                      AF093627 3285 bp mRNA PLN 29-NOV-1998
Zea mays poly(ADP)-ribose polymerase (PARP1) mRNA, complete cds
AF093627
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100.0%; Pred. No. 9.3e-139;
iive 0; Mismatches 0;
                                                                                                                                                                                          Eukaryota, Viridiplantae, Streptophyta, En
Spermatophyta, Magnoliophyta, Lillopsida,
clade, Panicoideae, Andropogoneae, Zea.
                                                                                                                                                                                                                                                       1 (bases 1 to 3285)
Mahajan, P.B. and Zuo, Z.
Purification and cDNA cloning of maize
Plant Physiol. 118 (3), 895-905 (1999)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2.4.2.30"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Zea mays"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
1. .3285
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/gene="PARP1
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RANGWIEKLKLAGANFYARVVKDIDCLIACGELDNRAEVYRARRKIF 19VBEGTIGE

CVKKNRKLPPDLYKLBNALESSKGSTYVVKVKGRSAVHESSGLODTAHILEDGKSTIN

ATLIMSDLLAGVNSYYVLOI IEQDDGSECYVPRKWGRYGSEKIGGOKLEEMSKTAAIK

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ALLELMKRLERVUSTYRAAMMEFEINMSEWPLGKLSKENIEKGFEALTEIQNLLKDTADO
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DKRTMLDLVKKDVGNNEQNKGSKRKKSENDIDSYKSARLDESTSEGTVRNKGQLVDPR
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Zea mays mRNA for poly(ADP-ribose) polymerase (3211bp).
AJ222589
AJ222589.1 GI:2632128
PARP page: poly(ADP-ribose) polymerase.
1 (bases 1 to 3211)
Babiychuk,E., Cottrill,P., Storozhenko,S., Fuangthong,M.,
Babiychuk,E., Cottrill,P., Storozhenko,S., Fuangthong,M.,
O'Farrell,M., Van Montagu,M., Inze,D. and Kushnir,S.
O'Farrell,M., Van Montagu,M., Inze,D. and Kushnir,S.
Unpublished
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Submitted (14-NOV-1997) Kushnir S., VIB, Dep.Genetics,
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/function="secondary protein modification"
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/protein_id="CAA10889.1"
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/db_xref="G1:2632129"
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Location/Qualifiers
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DSDESLDDYKWLHCDITPLAHDSEDYKLIRDYLLAWTHAPTHKDWSLELEEVFSLDRD
GELNKYSKYKNKHNKHNKMLLMHGSRLINFVGILSQGLRIAPPEAPVTGYMFGKGLYFAD
LVSKSAQYCYVDRNHPVGLMLLSEVALGDWYELKKAYSMDK PPRGKHSYKGLGKTYPD
ESEFVKWRDDVVVPCGKPVPSSIRSSELMYNEXIVYNTSQVKMQFLLKVRFHKKR"
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18-DEC-1998

ATH131705 3187 bp mRNA PLN 18-DEC-1 Arabidopsis thaliana mRNA for poly(ADP-ribose) polymerase. AJ131705

ATH131705 LOCUS DEFINITION ACCESSION

RESULT

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(IMPWWWHASCILKKTKQIKSVDDVEGIESLRWEDQOKIRKYVESGAGSNTSTSTGTS
STANNAKLEYGIEVGGYRACKTKOSEKILKGEVRIEVSPEBEDMUGLMWHHAKCF
IEMSSSTELBELEKEYGYRRSIPDSDCBALLPIVKKALPPAKTETPARACYPKSKAGMAHAKCF
IEMSSSTELBELEKEYGYNSIPDSDCBALLPIVKKALPPAKTETPARACYPKSRAGTKRKND
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STUDDPIR SKELDLRDKCADGMAFGPTALCPMOSGHLSERGAGTYRCHGYTSEWSKCSH
STLDDPIR IKGKWI IDDETBURDLLKWINKSQKSWFRRILLRPVLSGETSQGGGSKDATD
SSRSERLADLKVSIAGNTKERQPWKKRIEBEAGAEFHANVKKGTSCLIVVCGLTDIRDAE
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/db_xref="GI:403491"
/translation="MASPHFPWRAEYAKSSRSCKTCKSVINKENFRLGKLVQSTHFD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MRKARRMKVAIVREDYLVDCFKKORKLPFDKYKIEDTSESLVTVKVKGRSAVHEASGL
QEHCHILEDGNSIYNTTLSMSDLSTGINSYYILQIIQEDKGSDCYVFRKWGRVGNEKI
GGNKVEEMSKSDAVHEFKRLFLEKTGNTWESWEQKTNFQKQFGKFLPLDIDYGVNKQV
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Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
Rosidae; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                Direct Submission
Submitted (17-DEC-1998) Kazmaier M., Departement D'Ecophysiologie
Submitted (17-DEC-1998) Kazmaier M., Departement D'Ecophysiologie,
Commissariat A. L'energie Atomique,
CEA Cadarache, Lab. De Radiobiol. Vegetale, Bat. 185, 13108 St.
Paul-les-Durance, FRANCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /gene="parp-1"
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/standard_name="NAD(+) ADP-ribosyltransferase"
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/codon_start=1
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/product="poly(ADP-ribose) polymerase"
577 c 743 g 823 t
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Doucet-chabeaud, G. and Kazmaier, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
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